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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/401,293 | 09/23/1999 | MASAHIRO HAYAMA | Q55778 | 4480 |
| 7590 01/07/2003 SUGHRUE MION ZINN MACPEAK & SEAS 2100 PENNSYLVANIA AVENUE NW WASHINGTON, DC 200373202 | | EXAMINER | | |
| | | ANDERSON, MATTHEW D | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | | |

2186
DATE MAILED: 01/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| 1 . | | Application No. | Applicant(s) | | | |
|---|---|-------------------------|--|--|--|--|
| | | 09/401,293 | HAYAMA, MASAHIRO | | | |
| Office Action Summary | | Examiner | Art Unit | | | |
| | | Matthew D. Anderson | 2186 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)[| Responsive to communication(s) filed on 23 D | | | | | |
| 2a)⊠ | ,— | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition | on of Claims | | | | | |
| 4) Claim(s) 1-29 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-29</u> is/are rejected. | | | | | | |
| | Claim(s) is/are objected to. | | | | | |
| - | Claim(s) are subject to restriction and/or | election requirement. | | | | |
| Application Papers 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The specification is objected to by the Examiner. 10)⊠ The drawing(s) filed on <u>23 December 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) ☑ The proposed drawing correction filed on 23 <u>December 2002</u> is: a) ☑ approved b) ☐ disapproved by the Examiner | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 2) Notice | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal I | r (PTO-413) Paper No(s) Patent Application (PTO-152) | | | |

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DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on 12/23/02. These drawings are approved.

Information Disclosure Statement

2. The information disclosure statement filed 12/23/02 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered. A new form 1449 should be submitted.

Response to Amendment

3. In response to the amendment filed 12/23/02:

claims 1-7 have been amended, and the corresponding USC 112 rejections have been withdrawn;

new claims 8-29 have been added.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -



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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 5. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe *et al.* (US Patent 5,590,306).
- 6. With respect to claims 1, 3, 4, and 7, Watanabe *et al.* disclose a rewrite program are for storing a program for a rewriting processing procedure for said memory; and a controller for forming a plurality of flag areas locally in said memory when the rewriting program is written into said memory, performing determination of completion of one or more stages of rewriting processing and recording results of the determination into the respective flag areas, as recited in column 2, line 61 through column 4, line 5, and figures 15-17.
- 7. With respect to claims 2 and 5-6, Watanabe et al. disclose:

the memory including a plurality of blocks, each of which is an erasable unit and includes a data area and a flag area, as shown in figure 11;

the controller mapping the data areas of the plurality of blocks to successive addresses, as recited in column 13, lines 58-62.

- 8. With respect to claims 8, 14, 19, and 26, Watanabe *et al.* disclose the controller further determining if the rewriting processing was performed without interruption by comparing a value read from a flag area to an expected value, as recited in columns 4 and 5.
- 9. With respect to claims 9, 15, 20, and 27, Watanabe *et al.* disclose that if the controller determines that the rewriting process was interrupted, resuming the rewriting processing at the stage at which the rewriting processing was interrupted, as recited in column 14, lines 1-32.
- 10. With respect to claims 10, 16, 21, and 28, Watanabe *et al.* disclose updating a flag value after each stage of the rewriting processing is completed, as shown in figures 15 and 17.

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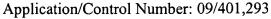
11. With respect to claims 11, 17, 22, and 29, Watanabe *et al.* disclose a rewriting start flag value being the first flag value to be updated, as recited in column 4, lines 65-67.

12. With respect to claims 12-13, 18, and 23-25, Watanabe *et al.* disclose the memory being a flash memory, as shown by the EEPROM (item 20) in figure 2.

Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 2, 5, 13, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe *et al.* and Sukegawa *et al.* (US Patent # 5,603,001).
- 15. With respect to claims 2 and 5-6, Sukegawa *et al.* disclose mapping the data areas of the plurality of block to successive addresses by teaching in column 15, lines 55-60, that consecutive disk addresses are mapped in the ROM and the flash EEPROMs.
- 16. It would have been obvious to one of ordinary skill in the art, having the teachings of the Watanabe *et al.* and Sukegawa *et al.* before him at the time the invention was made, to modify the flash memory refreshing taught by Watanabe *et al.*, to include the consecutive address mapping to flash, as taught by Sukegawa *et al.*, in order to aid in error detection and correction, as taught by Sukegawa *et al.*.





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Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Anderson whose telephone number is (703) 306-5931. The examiner can normally be reached on Monday-Friday, 2nd Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Matthew D. Anderson January 3, 2003

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100